



Serial No.: 09/840,716  
Title: METHOD FOR MAKING A MICROSTRUCTURE BY SURFACE  
MICROMACHINING  
Inventor(s): Sniegowski Et Al.  
Docket No.: 50060-00040  
James L. Johnson

(701) 293-7680

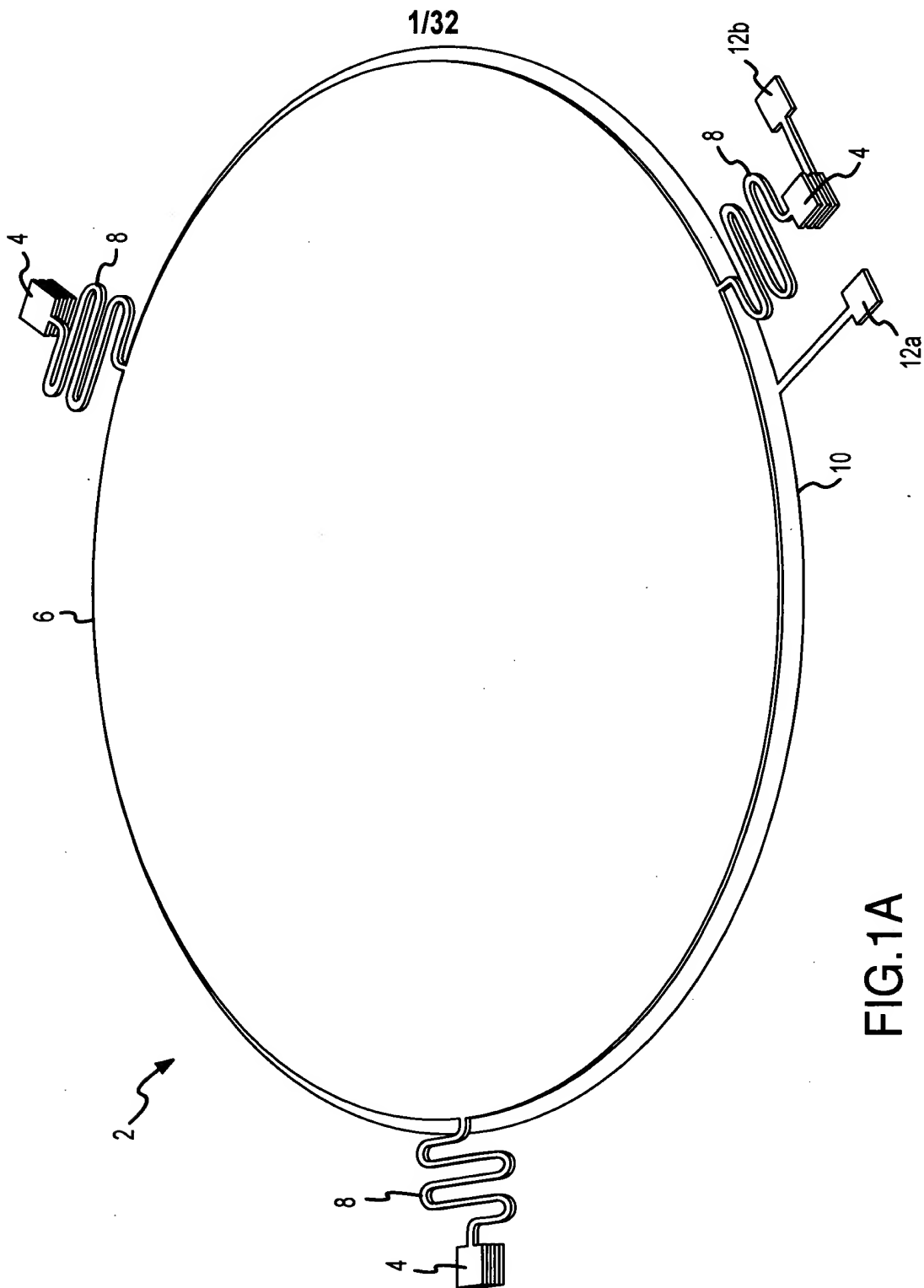


FIG. 1A

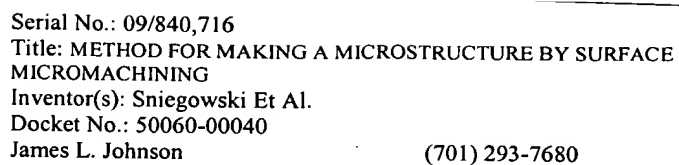


FIG. 1B

**FIG. 1B**



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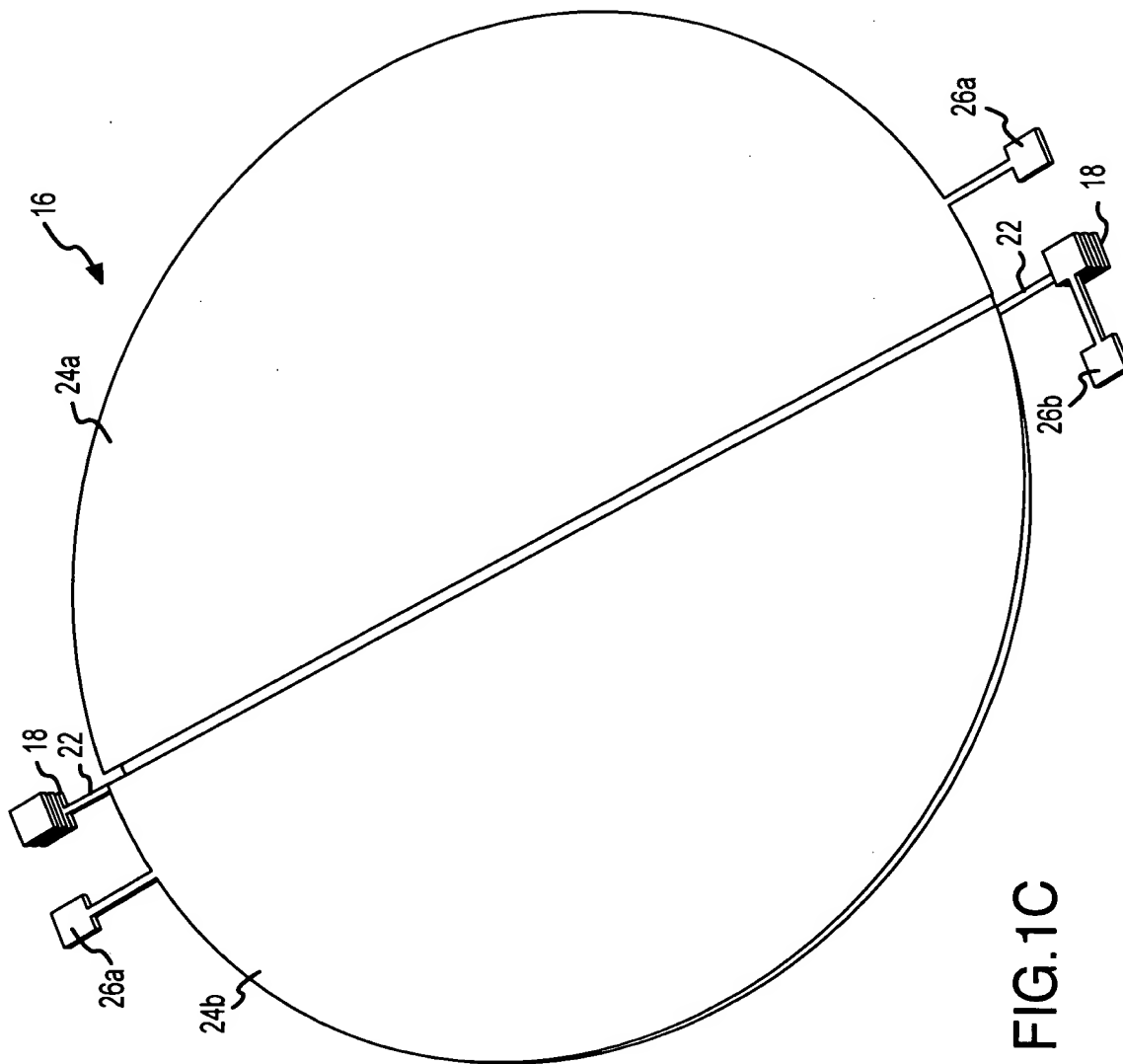
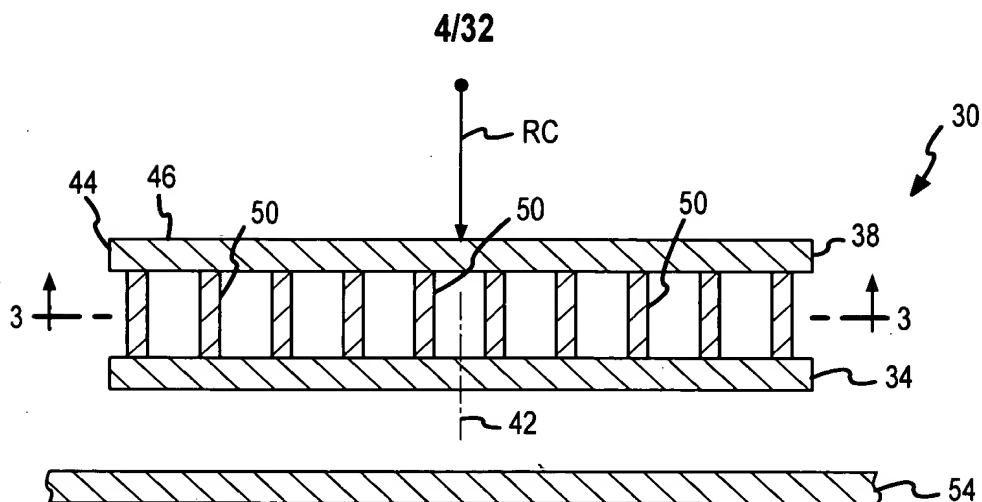
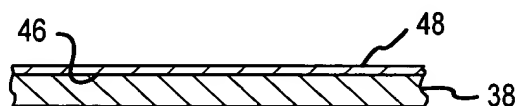


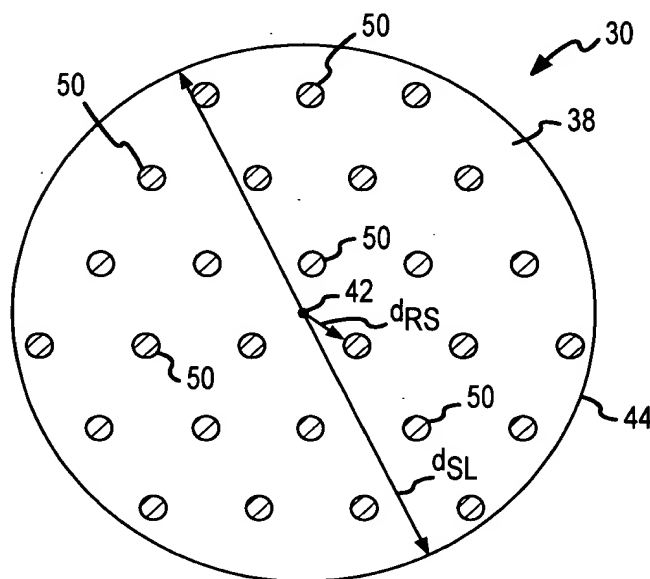
FIG. 1C



**FIG.2A**



**FIG.2B**



**FIG.3**

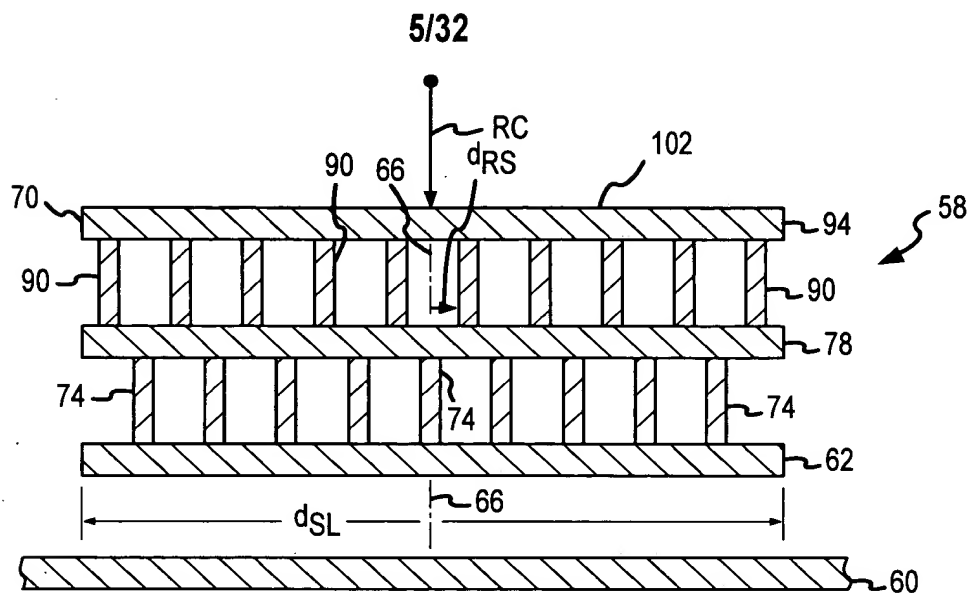


FIG. 4

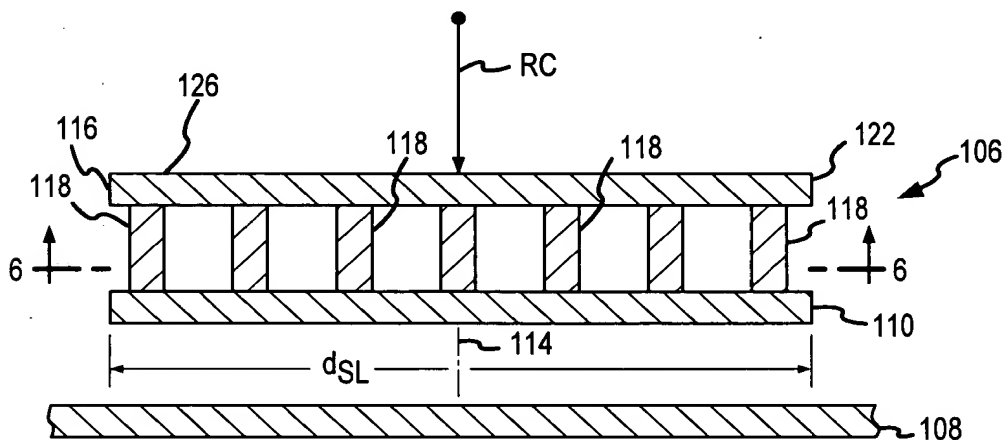


FIG. 5

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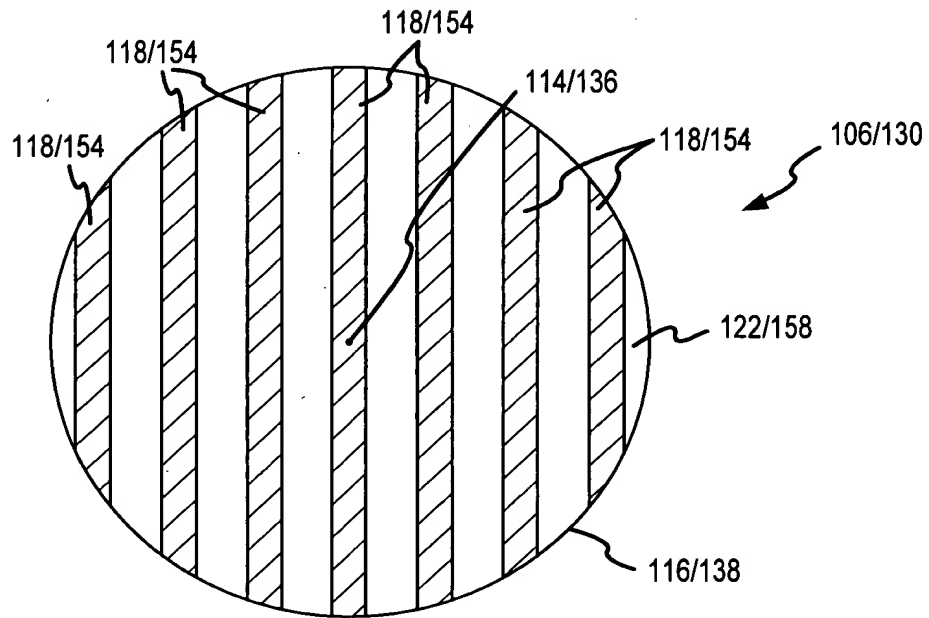


FIG. 6

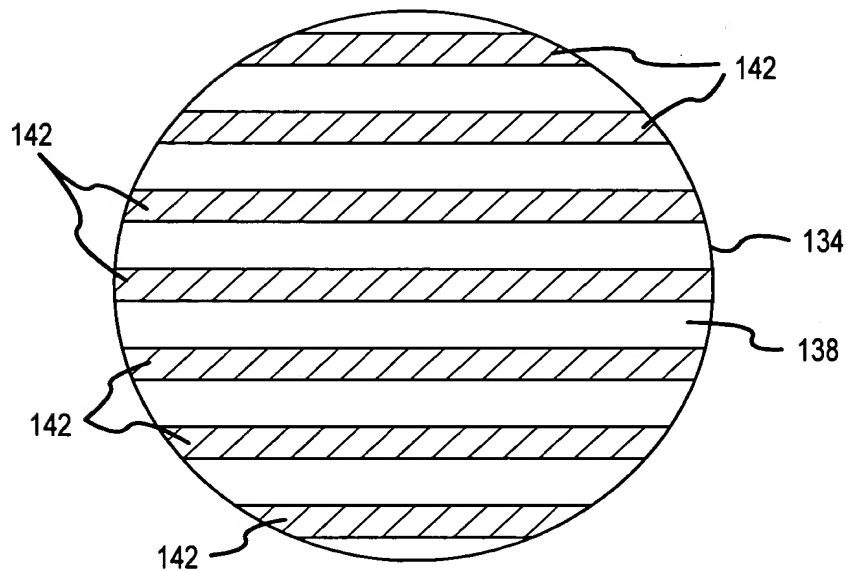


FIG. 8



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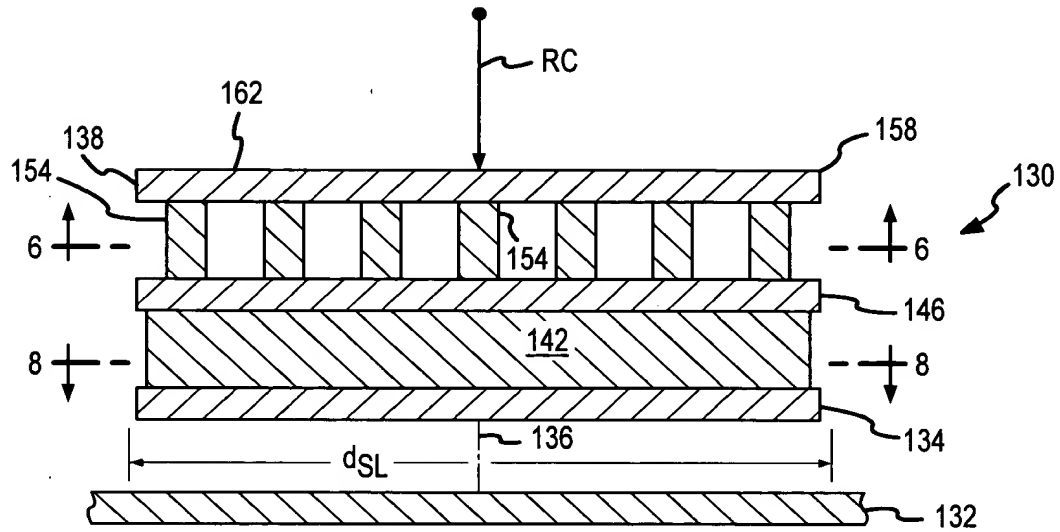


FIG.7



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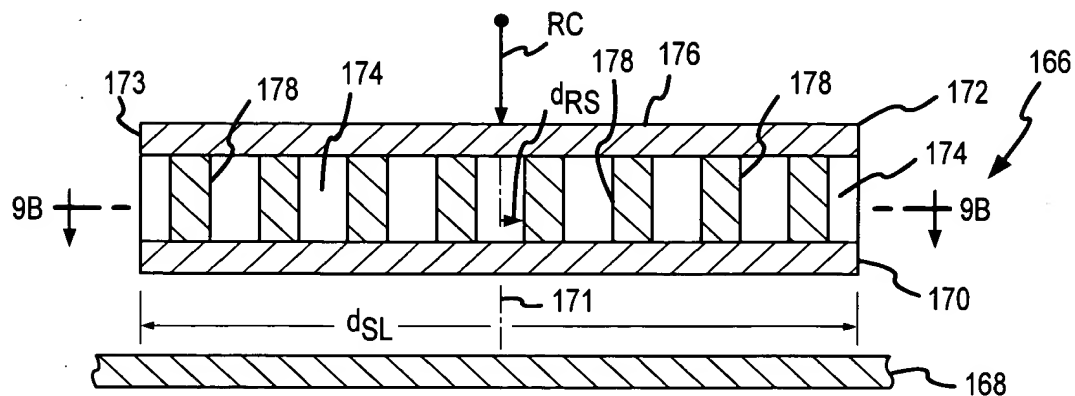


FIG. 9A

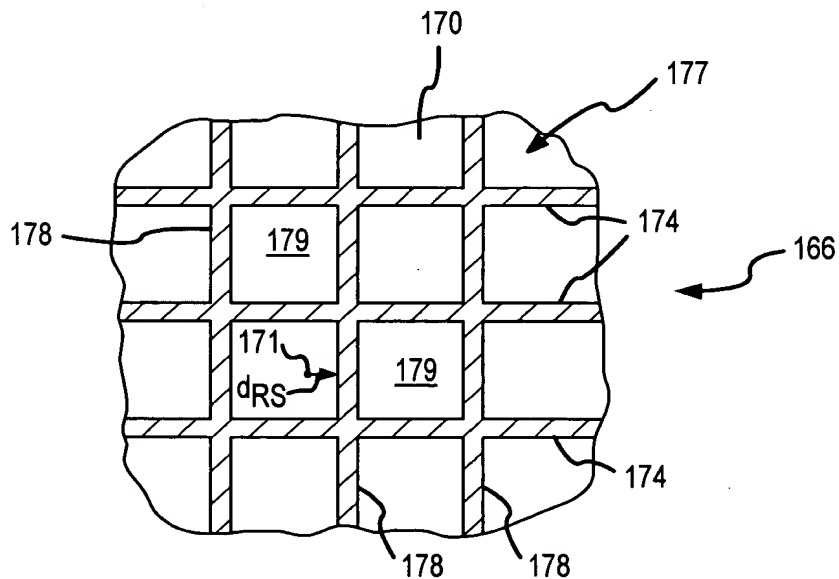


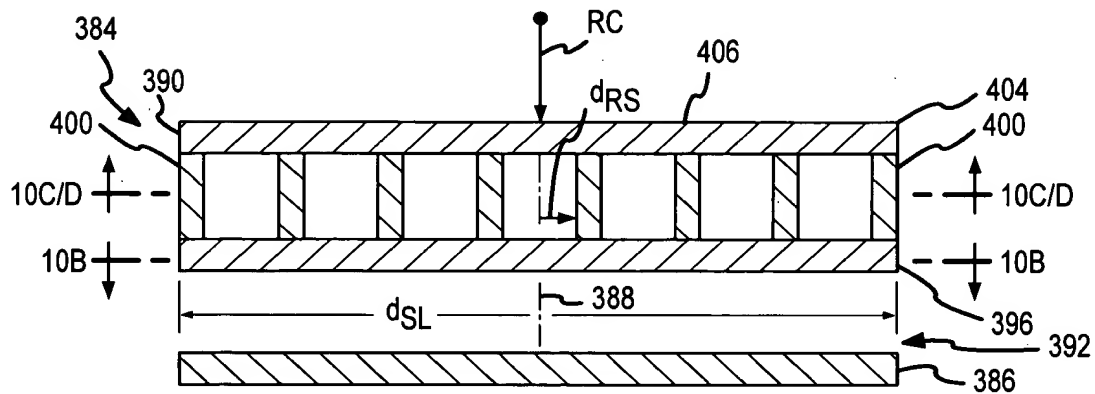
FIG. 9B



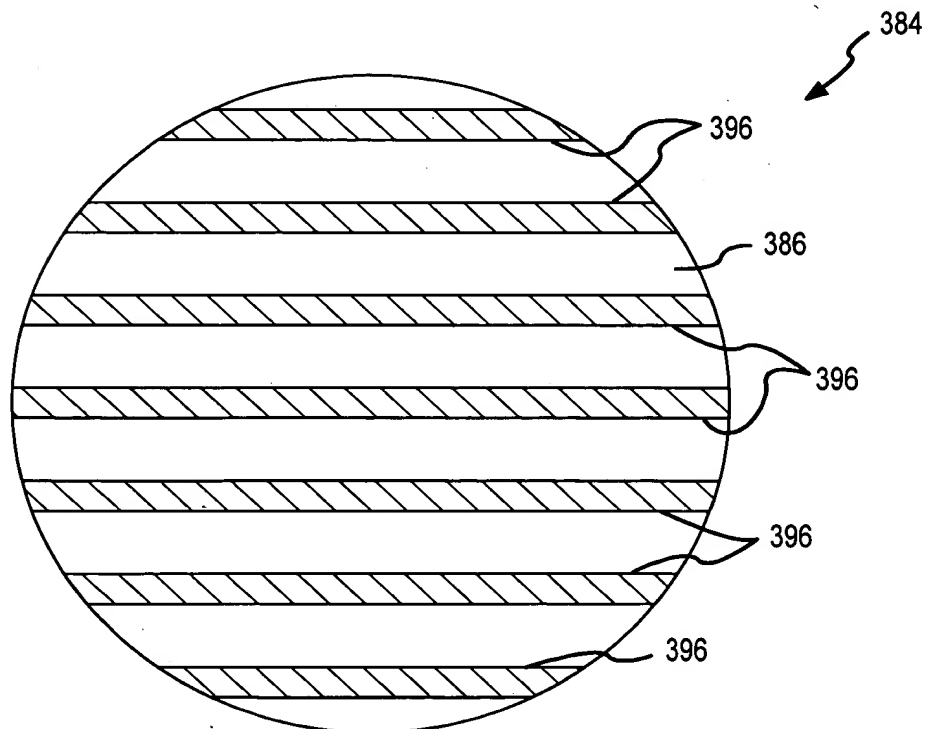
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**FIG.10A**



**FIG. 10B**



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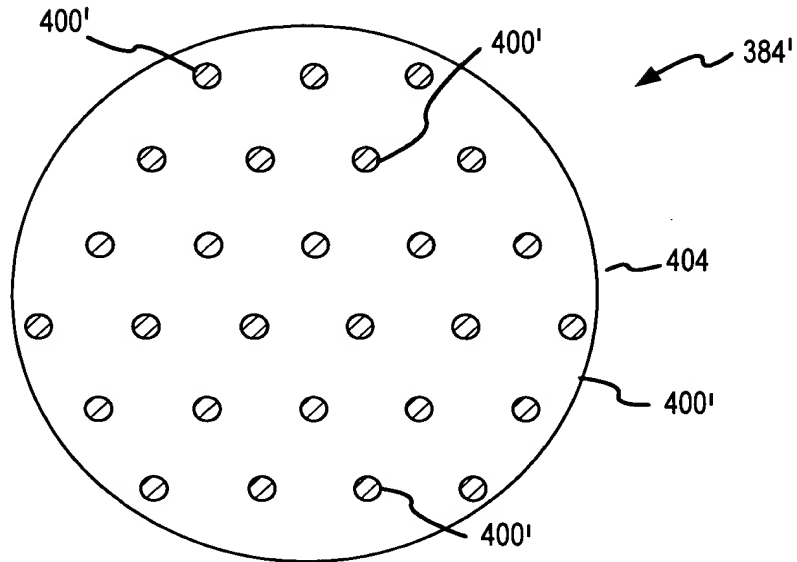


FIG. 10D

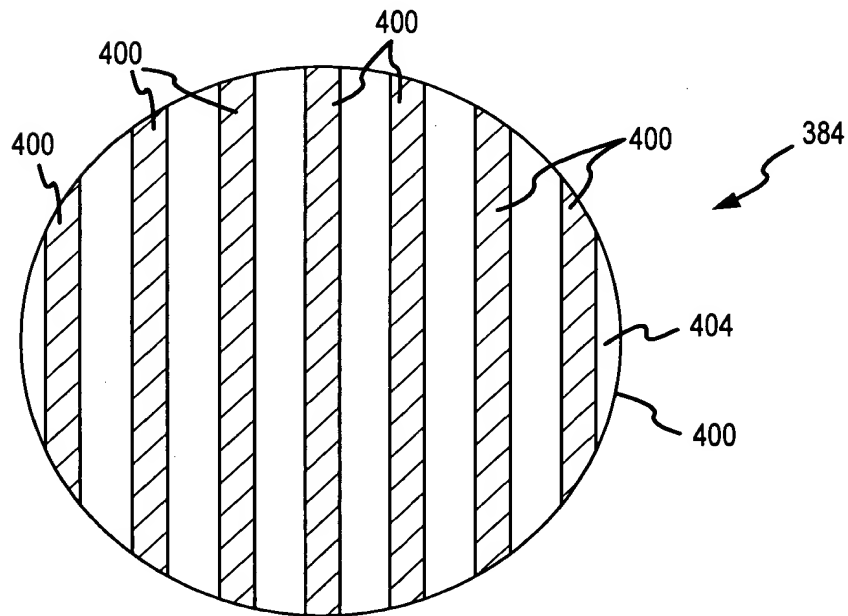


FIG. 10C



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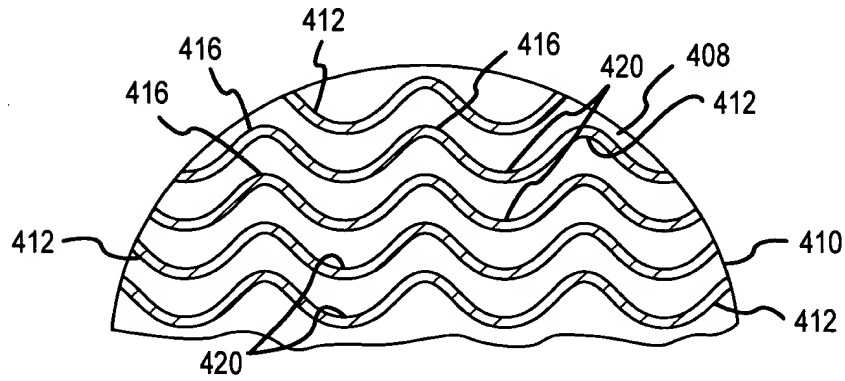


FIG. 11A

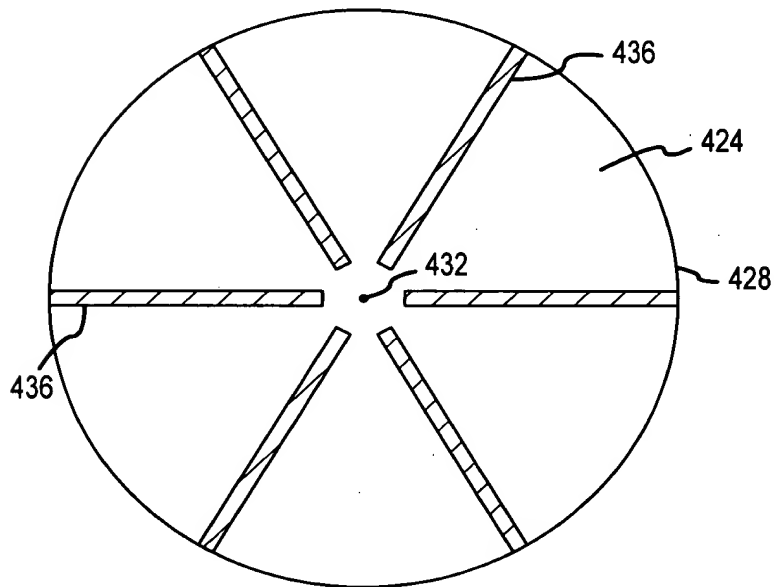


FIG. 11B



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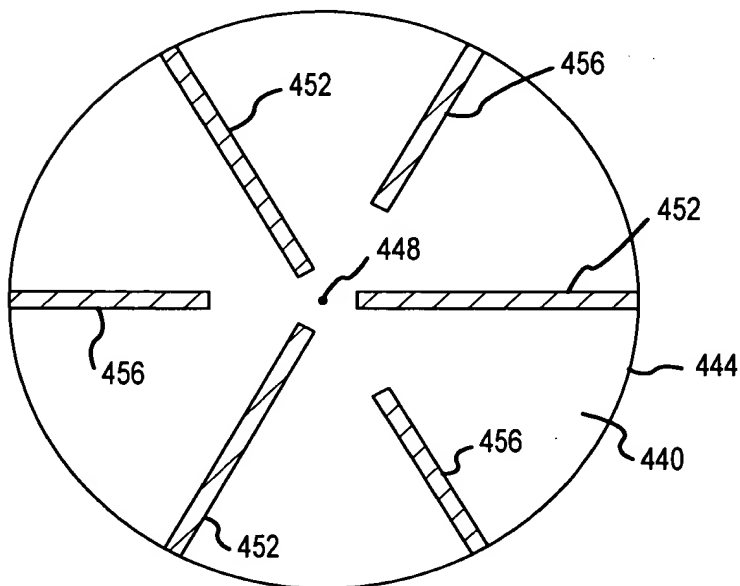


FIG. 11C

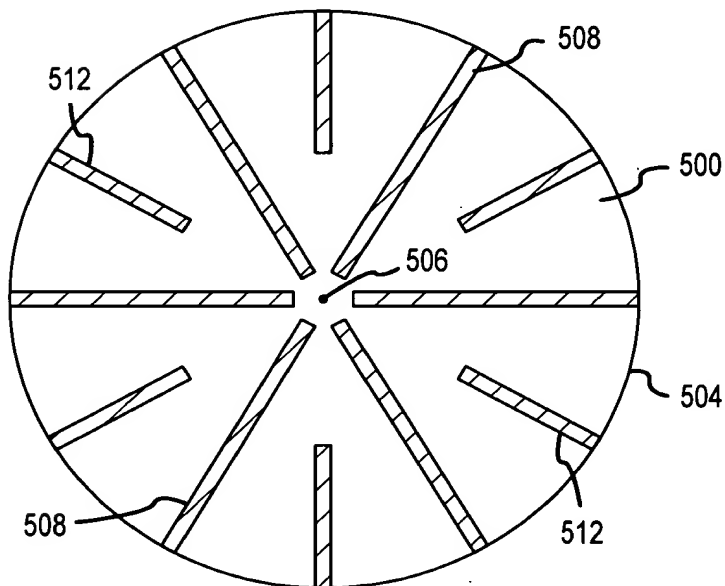


FIG. 11D



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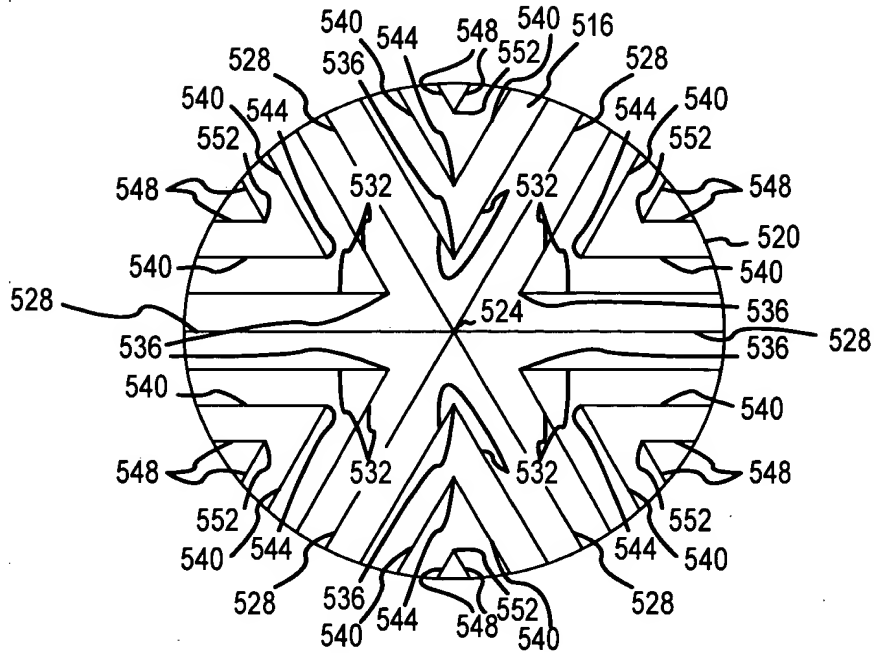


FIG. 11E

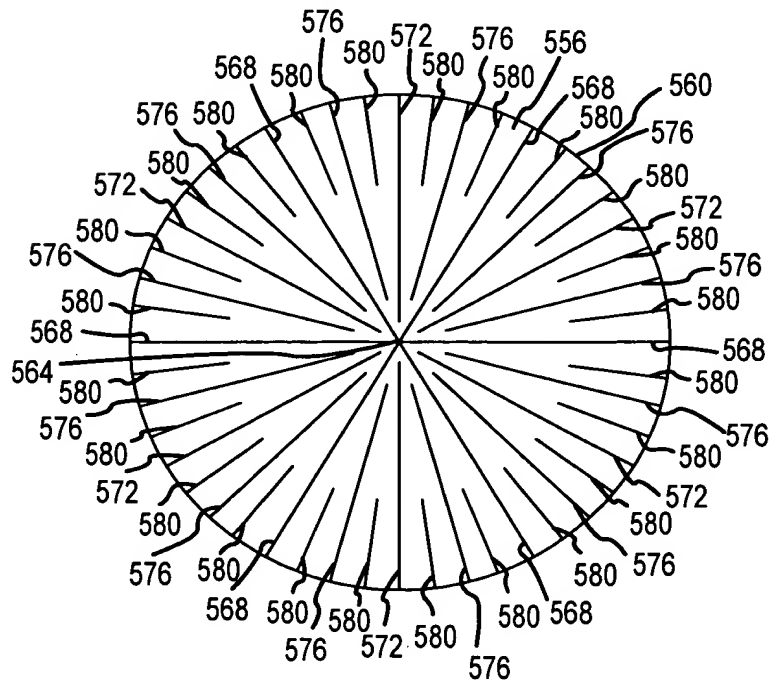


FIG. 11F



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FIG. 12A

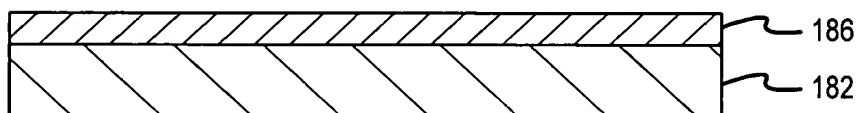


FIG. 12B

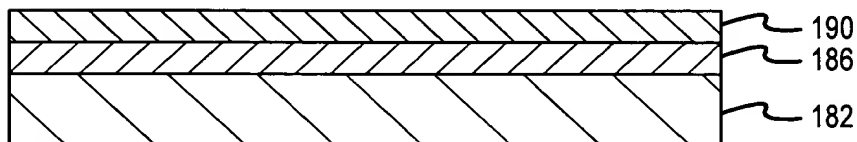


FIG. 12C

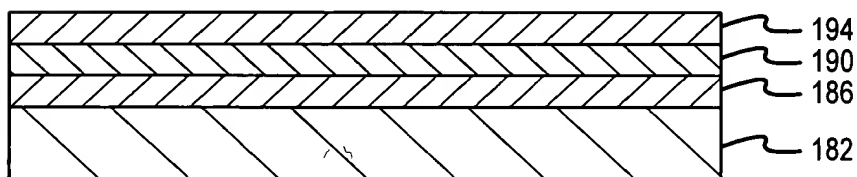


FIG. 12D



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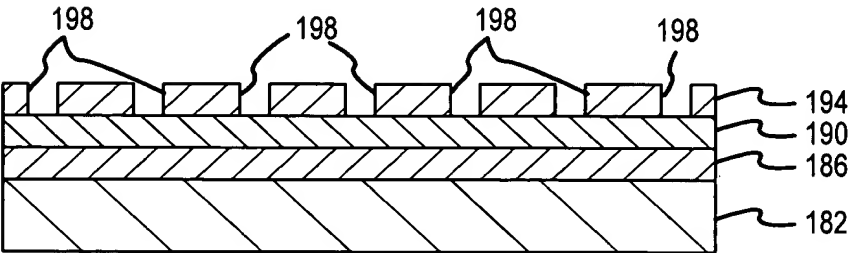


FIG.12E

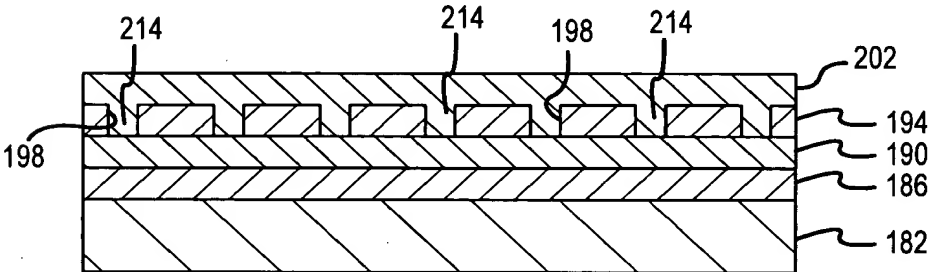


FIG.12F

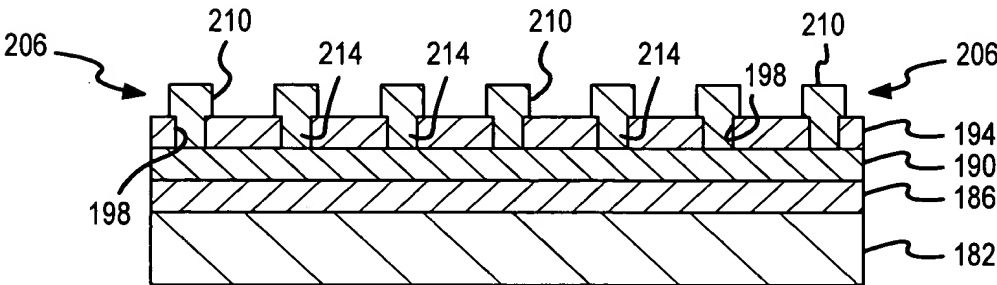


FIG.12G



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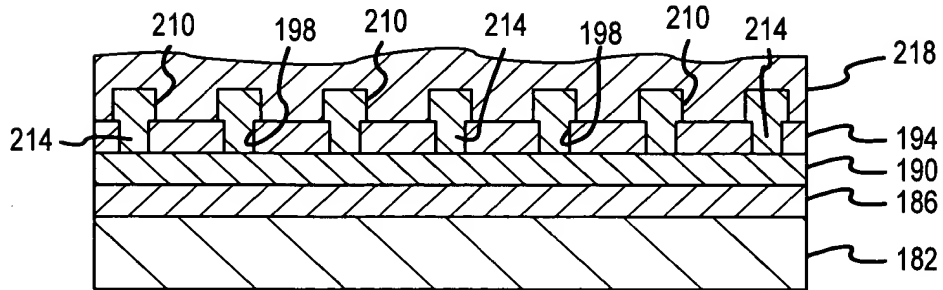


FIG. 12H

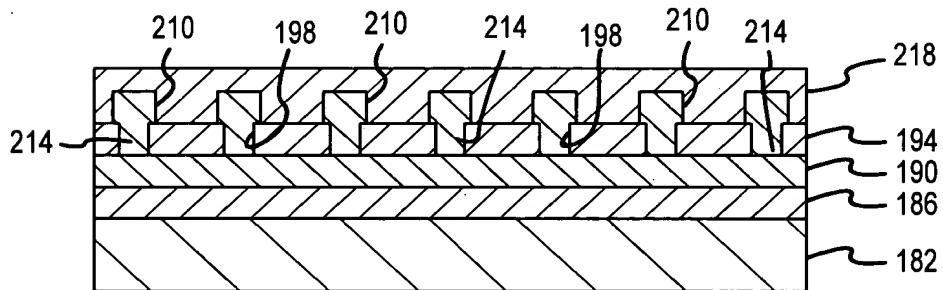


FIG. 12I

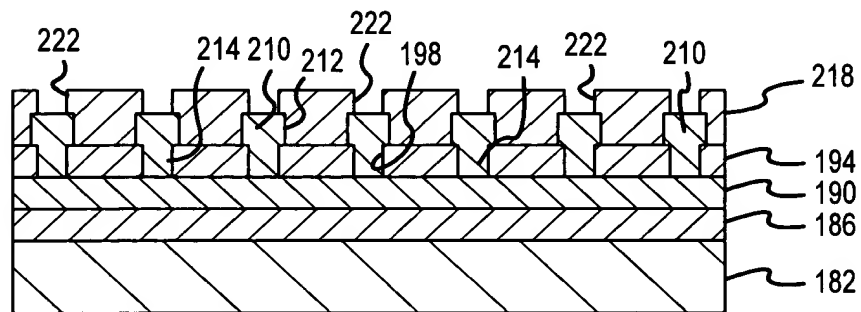


FIG. 12J



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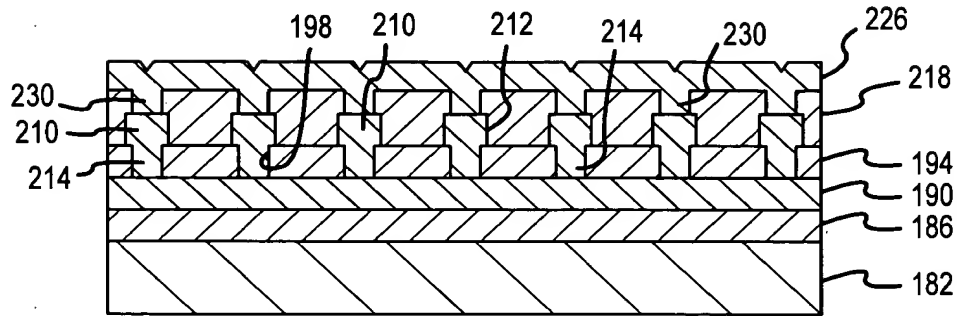


FIG.12K

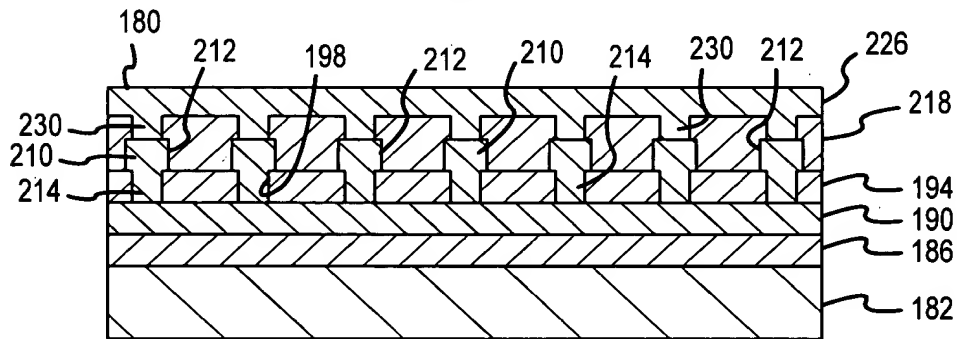


FIG. 12L

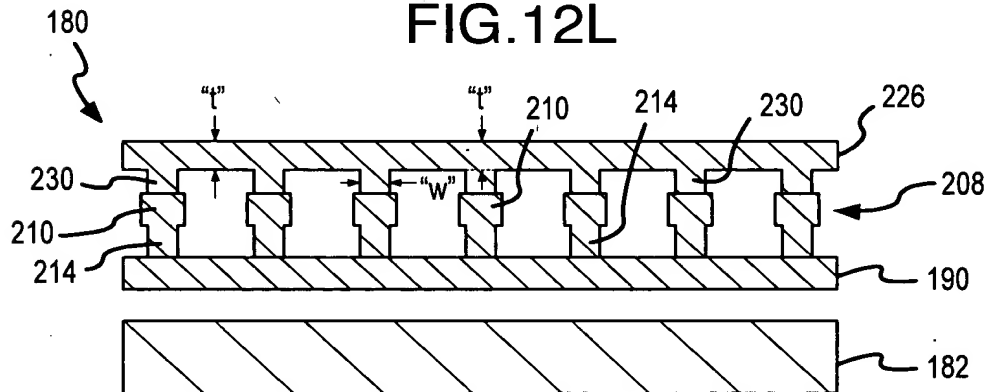


FIG. 12M



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FIG.13A

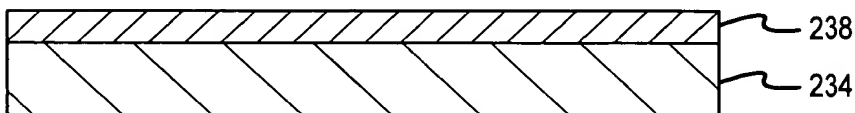


FIG.13B

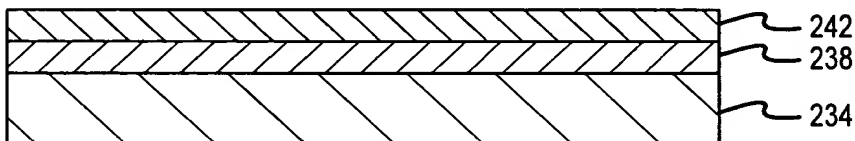


FIG.13C

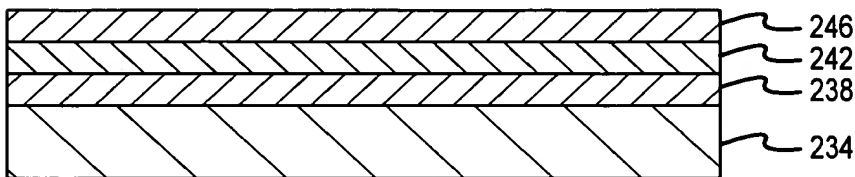


FIG.13D



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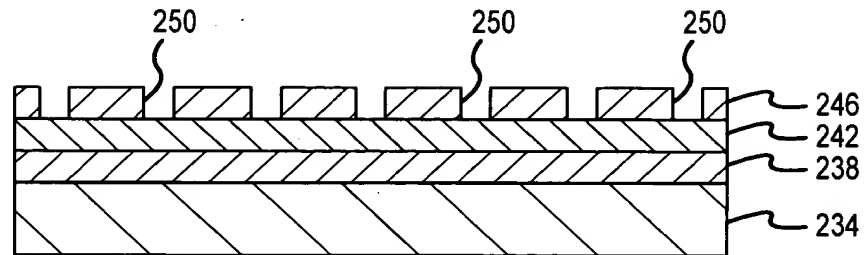


FIG.13E

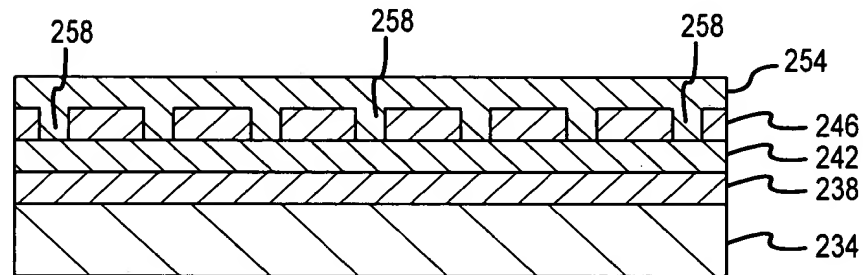


FIG.13F

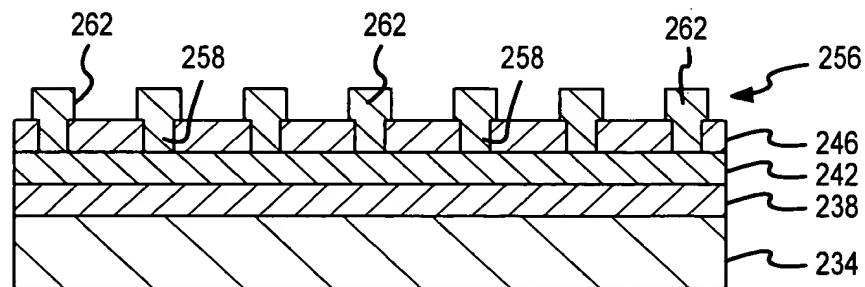


FIG.13G



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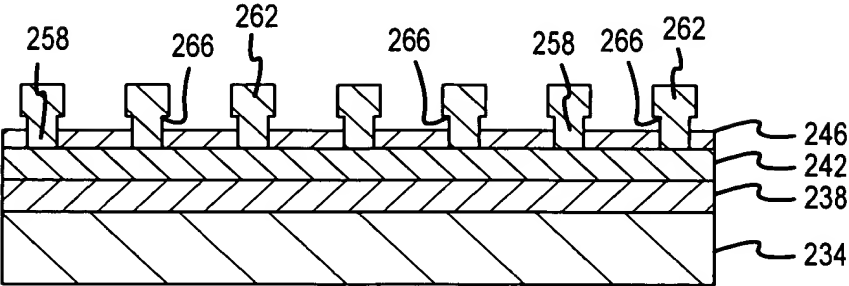


FIG.13H

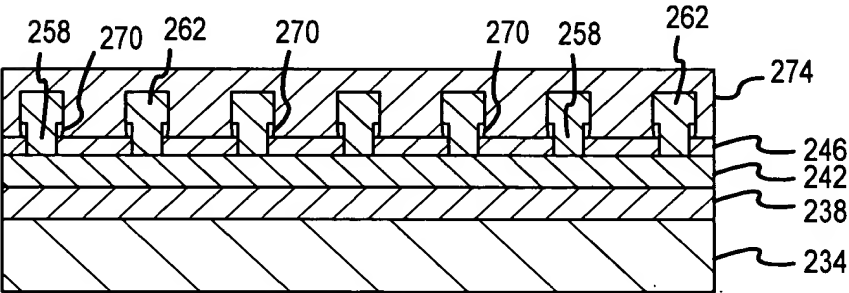


FIG.13I

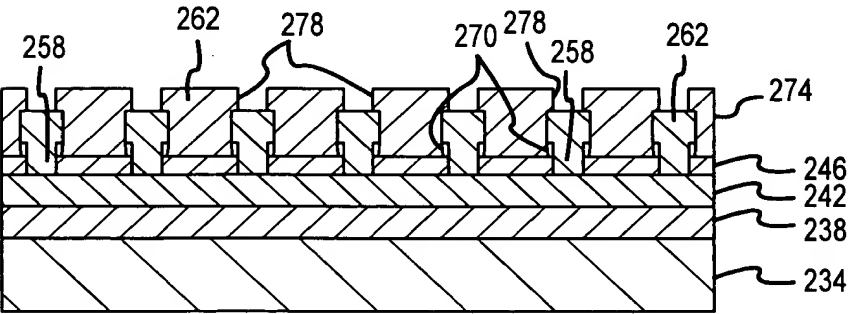


FIG.13J



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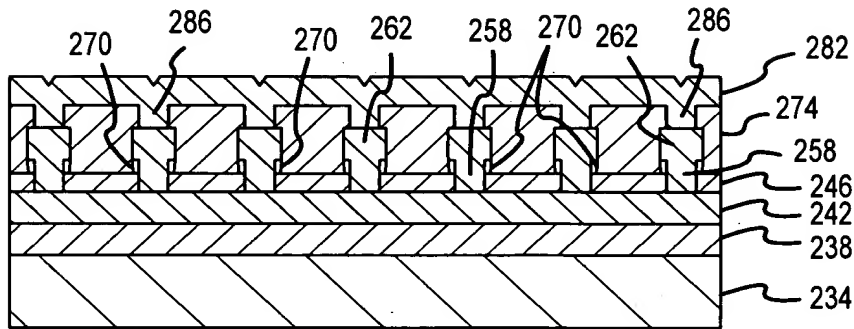


FIG. 13K

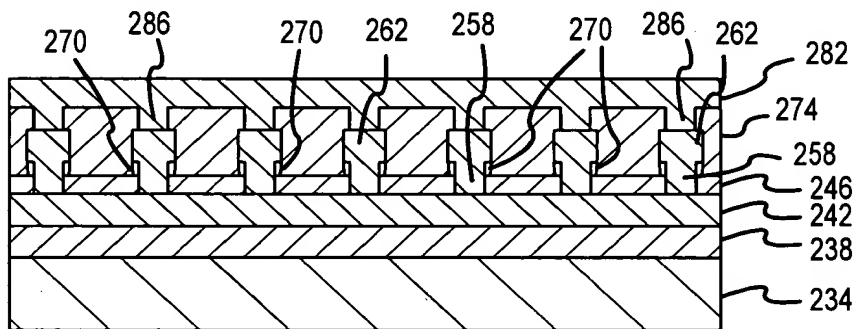


FIG. 13L

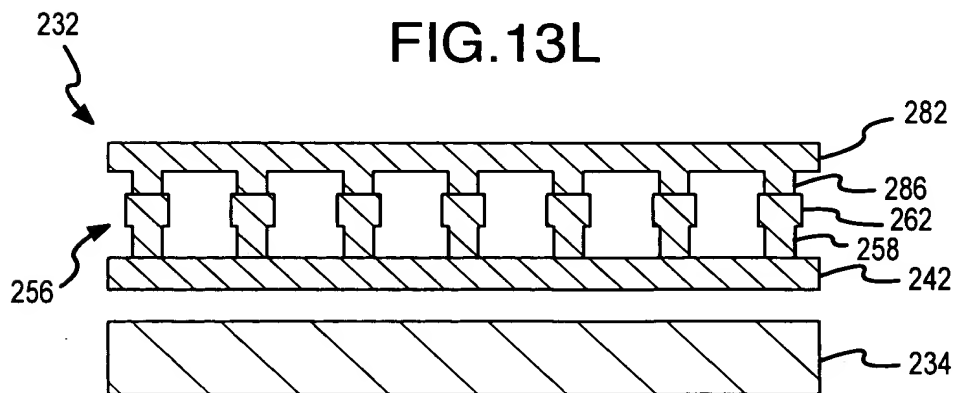
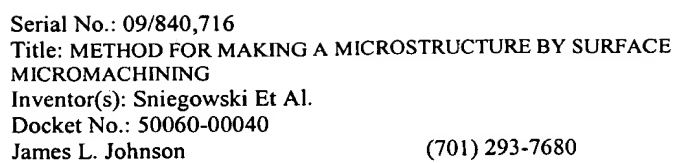


FIG. 13M



A cross-sectional view of a multi-layered structure. The top layer is labeled 364 and contains a series of parallel diagonal lines sloping downwards from left to right. Below this is a middle layer labeled 360, which is a solid, uniform layer. The bottom layer is labeled 356 and contains a series of parallel diagonal lines sloping upwards from left to right. The layers are stacked horizontally.

A cross-sectional view of a device structure. It features a top layer with a series of rectangular protrusions. The top surface of these protrusions is labeled 368. Below the protrusions is a thin, uniform layer labeled 360. The base of the structure is a thick layer with diagonal hatching, labeled 356.

FIG.14C



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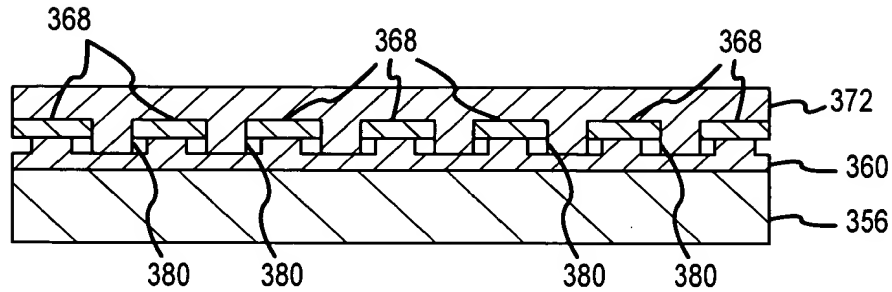


FIG. 14D

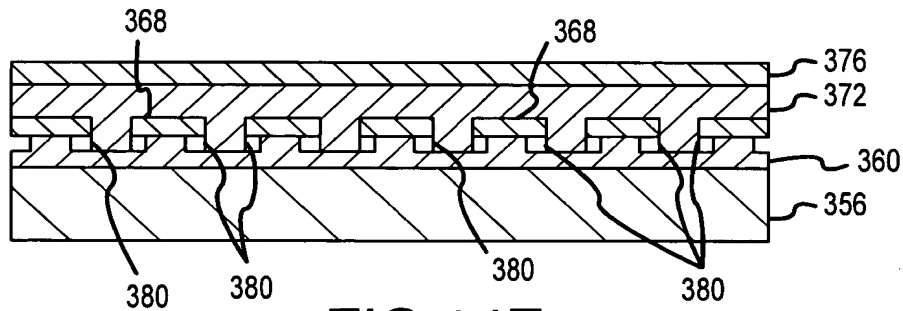


FIG. 14E

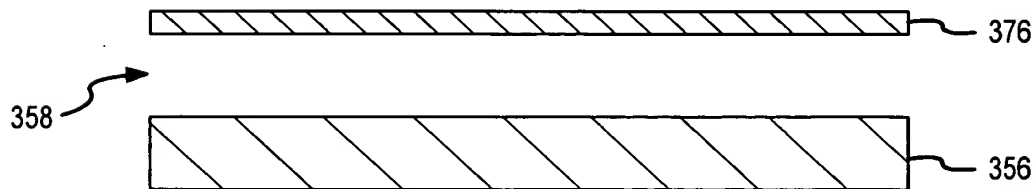


FIG. 14F



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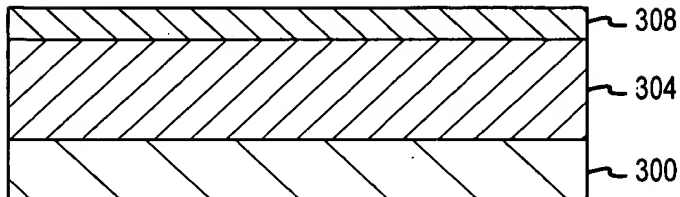


FIG.15A

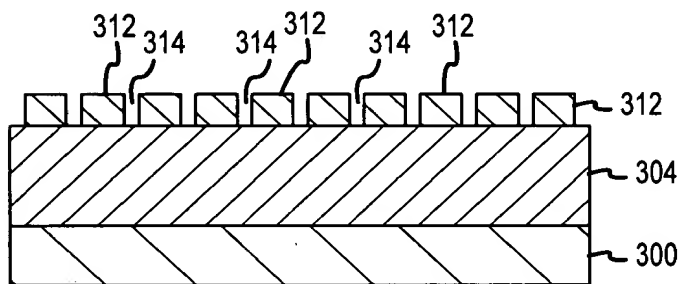


FIG.15B

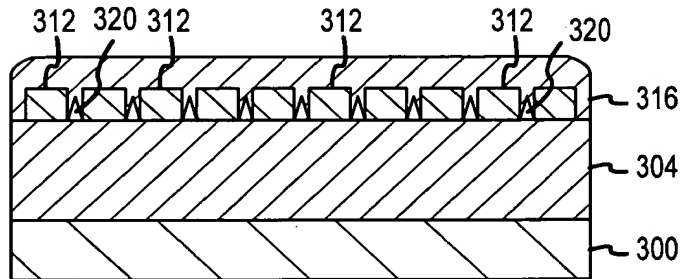


FIG.15C





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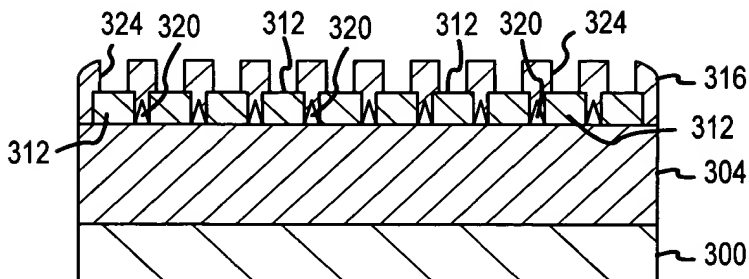


FIG.15D

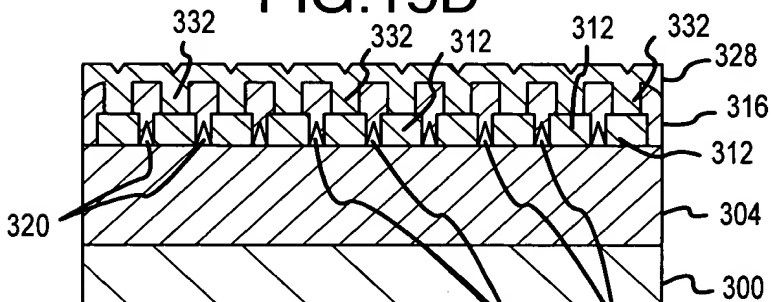


FIG.15E

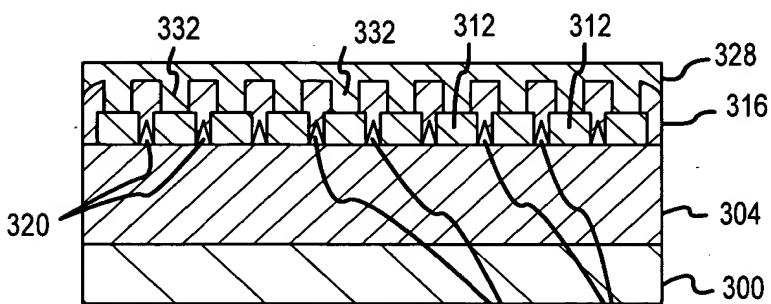


FIG.15F

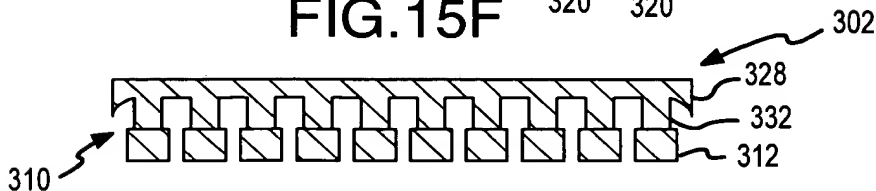
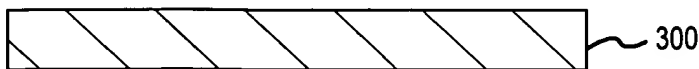


FIG.15G





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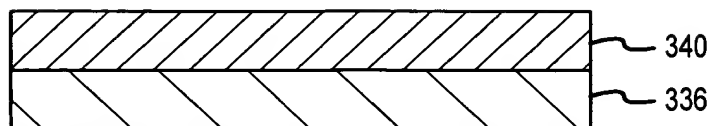


FIG.16A

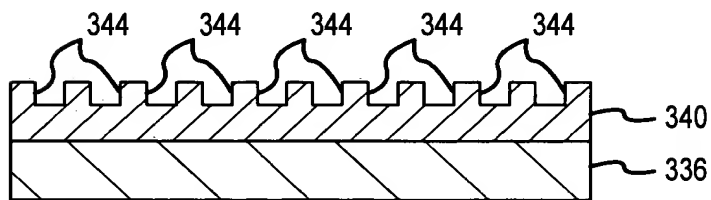


FIG.16B

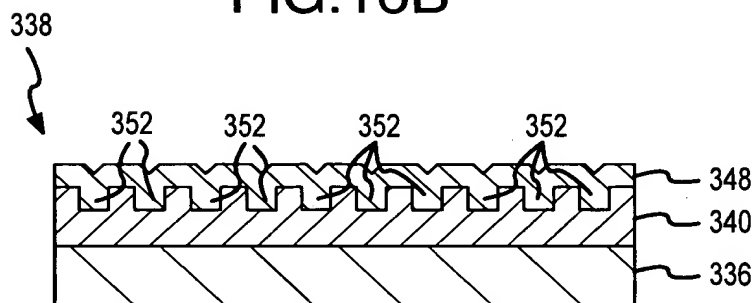


FIG.16C



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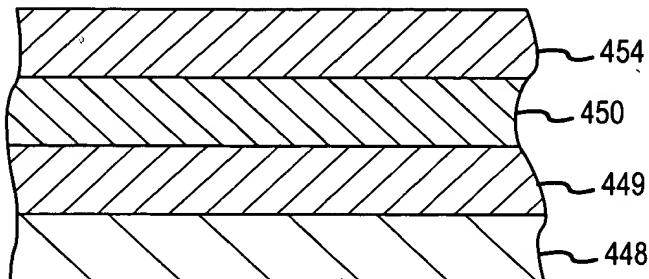


FIG.17A

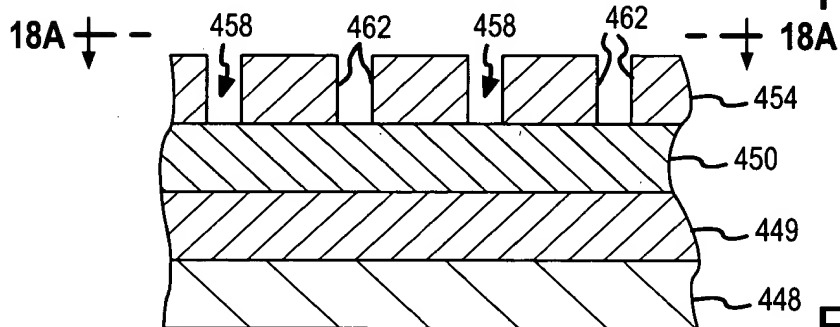


FIG.17B

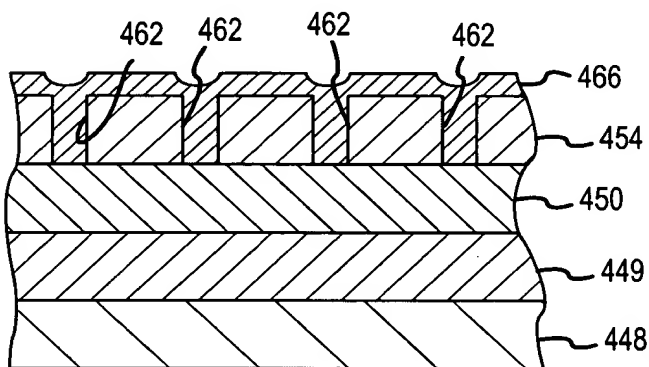


FIG.17C

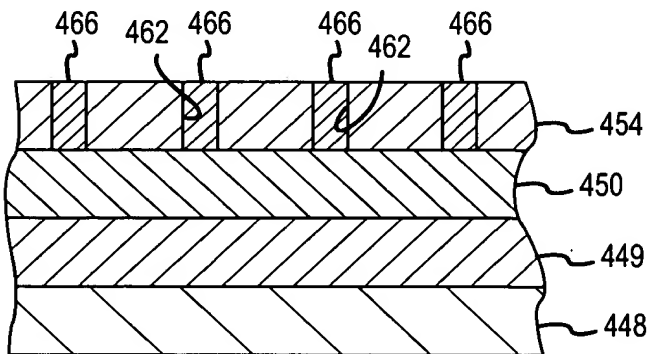


FIG.17D



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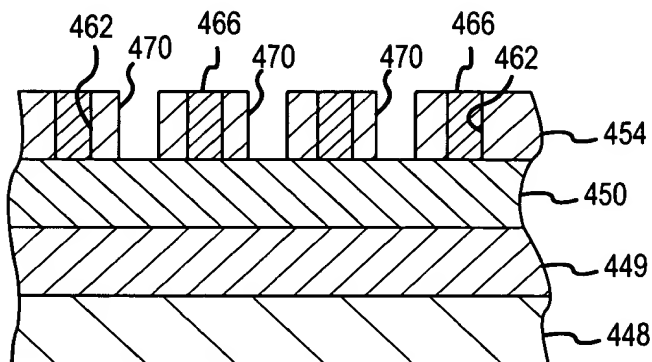


FIG. 17E

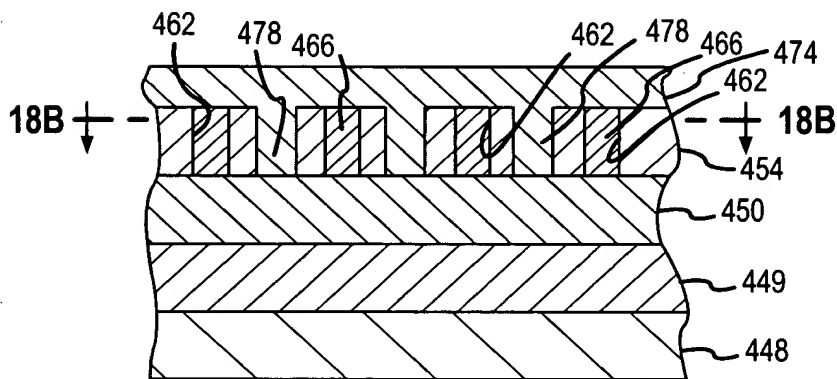


FIG. 17F

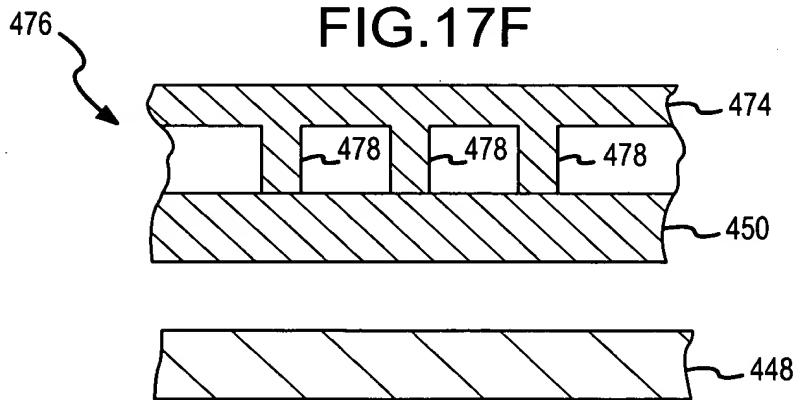


FIG. 17G



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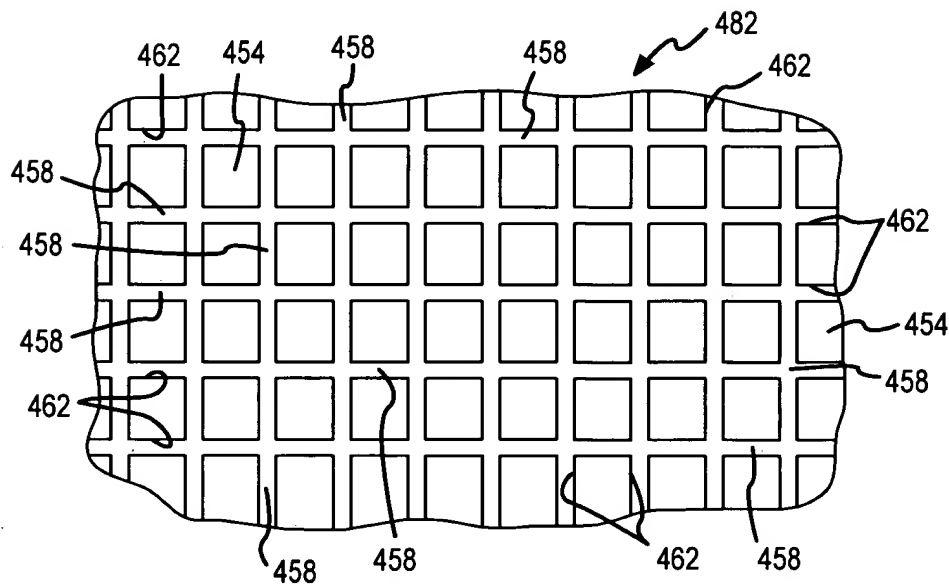


FIG. 18A

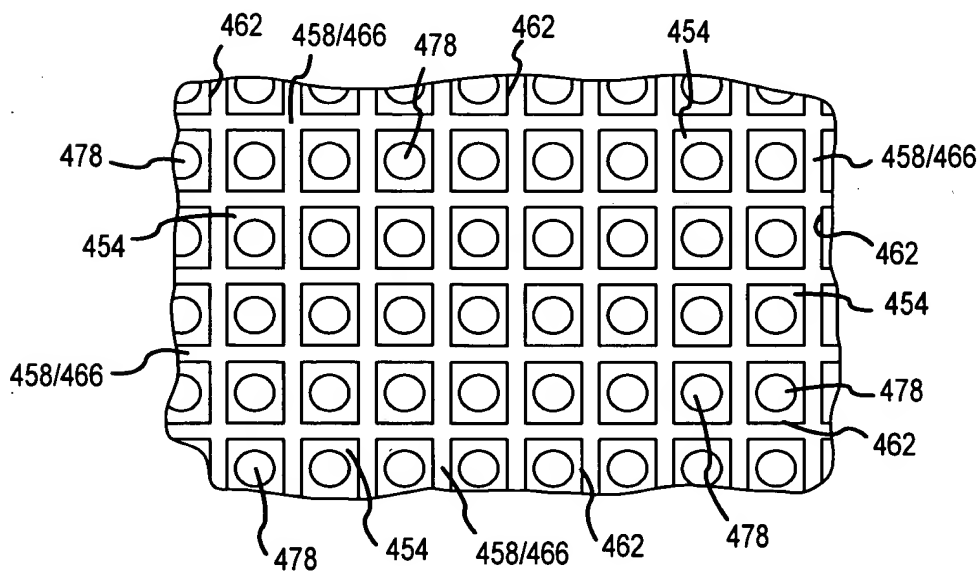


FIG. 18B



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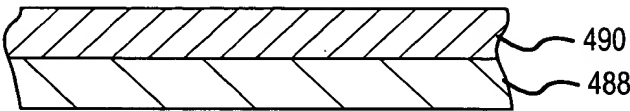


FIG.19A

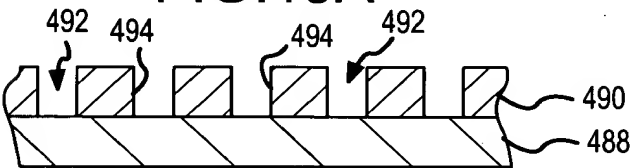


FIG.19B

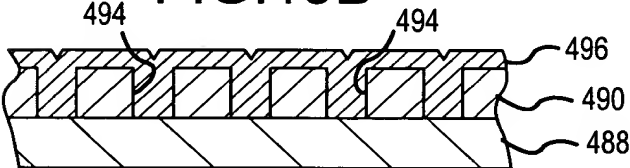


FIG.19C

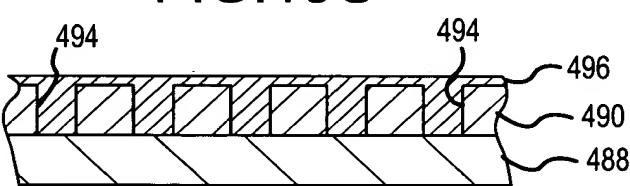


FIG.19D

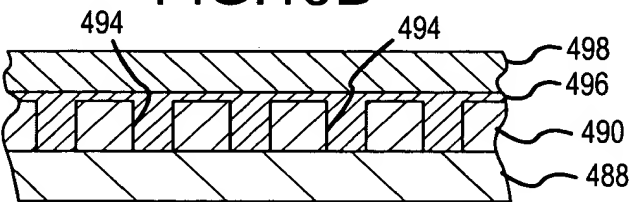


FIG.19E

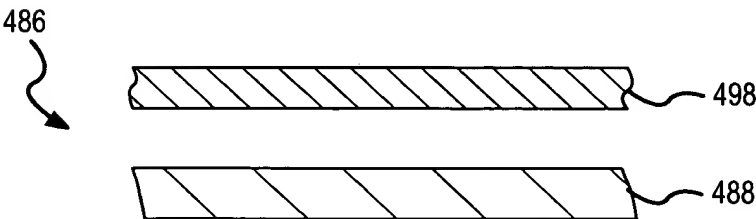


FIG.19F



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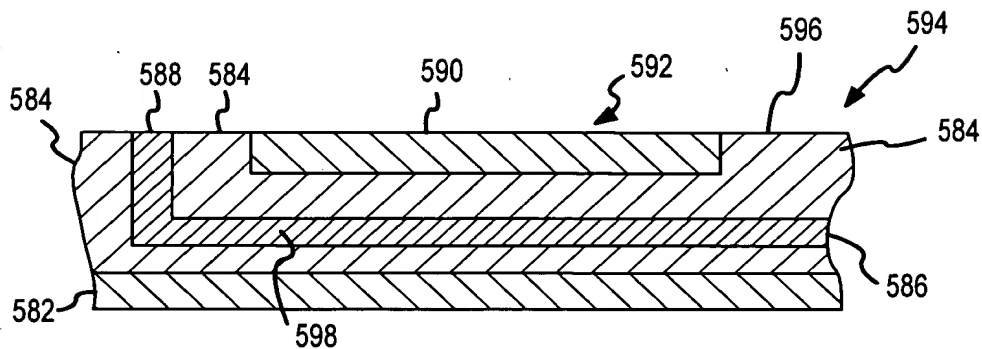


FIG. 20A

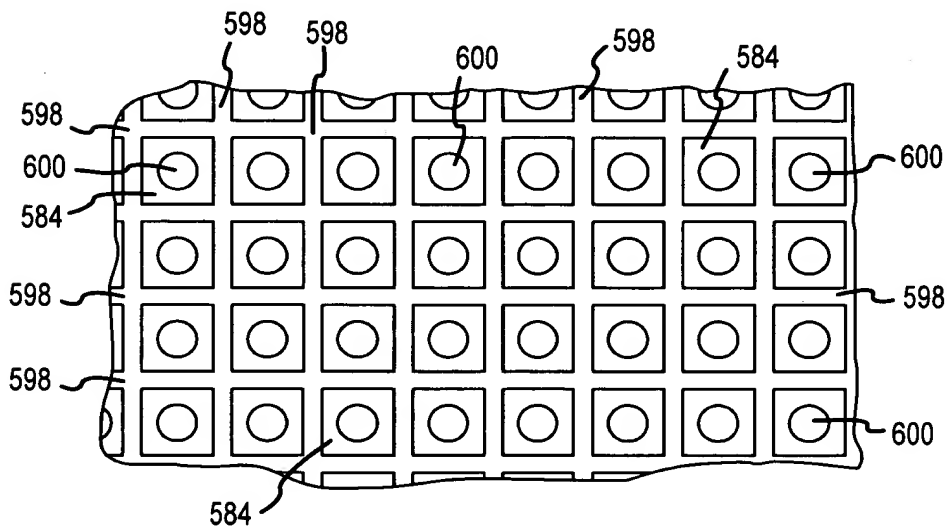


FIG. 20B



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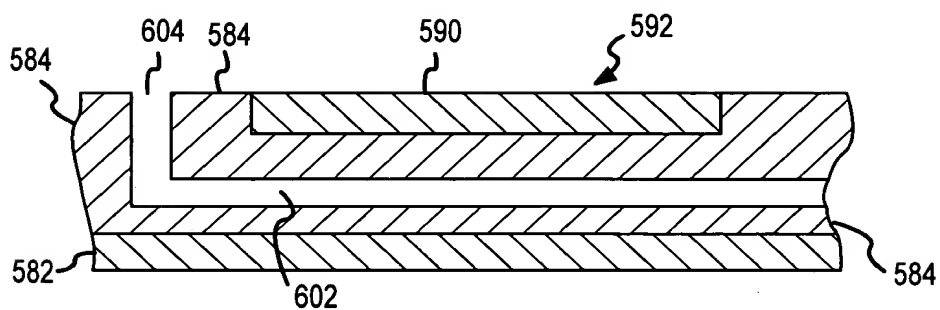


FIG.20C

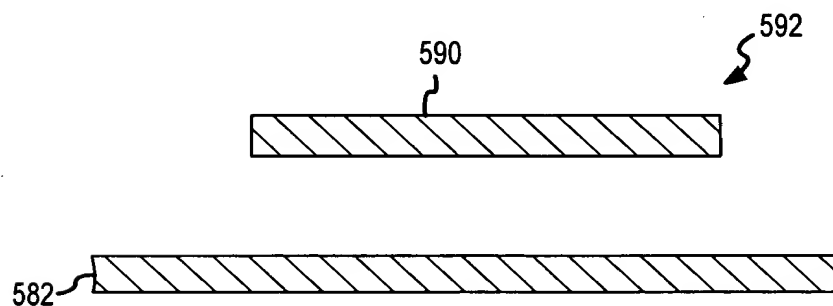


FIG.20D